

***LineUp With Math™* Alignment**  
**Academic Content Standards - Mathematics**

**Mathematical Processes Standard**

**Benchmarks Grades 8-10**

A. Formulate a problem or mathematical model in response to a specific need or situation, determine information required to solve the problem, choose method for obtaining this information, and set limits for acceptable solution.

***LineUp With Math™* Activities**

--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.

--Explore and apply a variety of strategies to optimize the solution of air traffic control conflicts.

B. Apply mathematical knowledge and skills routinely in other content areas and practical situations.

--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

C. Recognize and use connections between equivalent representations and related procedures for a mathematical concept; e.g., zero of a function and the x-intercept of the graph of the function, apply proportional thinking when measuring, describing functions, and comparing probabilities.

--Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control.

E. Use a variety of mathematical representations flexibly and appropriately to organize, record and communicate mathematical ideas.

--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.

--Choose and apply a variety of strategies to optimize the solution of air traffic control conflicts.

F. Use precise mathematical language and notations to represent problem situations and mathematical ideas.

--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.

G. Write clearly and coherently about mathematical thinking and ideas.

--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.

H. Locate and interpret mathematical information accurately, and communicate ideas, processes and solutions in a complete and easily understood manner.

--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.